



## **Dental Sealant Fact Sheet**

### **What are dental sealants?**

Dental sealants are thin plastic coatings which are applied to the chewing surfaces of the molars (back teeth). Most tooth decay in children and teens occurs in these surfaces. Sealants cover the chewing surfaces to prevent decay.

### **Which teeth are suitable for sealants?**

Permanent molars are the most likely to benefit from sealant application. First molars usually come into the mouth when a child is about 6 years of age. Second molars appear at about age 12. It is best if the sealant is applied soon after the molars have erupted, before the teeth have a chance to decay. For that reason, children between the ages of 5 and 15 benefit most from sealants.

### **How are sealants applied?**

Applying sealants does not require drilling or removing tooth structure. It is an easy three-step process: A dentist or dental hygienist cleans the tooth with a special toothpaste. A special cleansing liquid, on a tiny piece of cotton, is rubbed gently on the tooth and is washed off. Finally, the sealant is painted on the tooth. It takes about a minute for the sealant to form a protective shield.

### **What are the benefits of sealants?**

Sealants are slippery and make it harder for plaque that causes decay to stick in

the pits and grooves of molars. Because sealants can prevent more than 80% of dental decay in children, they reduce the need for fillings and other more expensive treatment. Sealants are an economical preventive measure to keep teeth healthy for years.

### **Are sealants visible?**

Upon close examination sealants can be seen. Sealants can be clear, white, or slightly tinted. Because they are used only on the back teeth, sealants cannot be seen when a child talks or smiles.

### **How long will sealants last?**

One sealant application can last for as long as 5 to 10 years. Sealants should be checked regularly, and reapplied if they are no longer in place.

### **Will sealants replace fluoride?**

NO. Fluorides, such as those used in community water, and toothpaste also help to prevent decay. Fluoride works best on the smooth surfaces of teeth. The chewing surfaces on the back teeth, however, have tiny grooves where decay often begins. Sealants keep germs out of the grooves by covering them with a safe plastic coating. Sealants and fluorides work together to prevent tooth decay.

### **Are sealants safe and effective?**

Yes. Dental sealants have been used for more than 40 years. Due to technology and science, they have continued to improve over the years. Clinical studies have shown sealants to be very effective in reducing tooth decay in children. Dental sealants are safe, effective and economical.

## **Why is sealing a tooth better than waiting for decay and filling the cavity?**

Sealants help maintain sound, intact teeth. Decay destroys the structure of the tooth. Each time a tooth is filled or a filling is replaced, additional tooth structure is lost. Fillings last an average of 6 to 8 years before they need to be replaced. Appropriate use of sealants can save time, money, and the discomfort associated with dental treatment procedures.

### **School-Based Sealant Programs**

- U. S. Task Force on Community Preventive Services found strong scientific evidence that school based sealant delivery programs are effective in reducing cavities and strongly recommended school sealant programs to prevent caries.
- An AHRQ-funded study that examined the dental experiences of 15,438 children enrolled in the

North Carolina Medicaid program from 1985 to 1992 found that sealants were effective in preventing tooth decay in the chewing surfaces of the bicuspid and molar teeth.<sup>1</sup>

- School-based sealant programs provide sealants to children unlikely to receive them otherwise (e.g., children in low-income households). Children of racial and ethnic minority groups have twice as much untreated decay in their permanent teeth, but only receive about half as many dental sealants.
- Children receiving dental sealants in school-based programs have 60% fewer new decayed pit and fissure surfaces in back teeth for up to 2 to 5 years after a single application. Among children, 90% of decay is in pits and fissures.
- In a study in Ohio, among students who attended schools with sealant programs and had sealants on their teeth, 70.2% received them at school.<sup>2</sup>

## **REFERENCES:**

---

<sup>1</sup> Weintraub JA, Stearns SC, Rozier G, et al. Treatment outcomes and costs of dental sealants among children enrolled in Medicaid. *Am J Public Health* 2001;91(11):1877-81.

<sup>2</sup> Impact of Targeted, School-Based Dental Sealant Programs in Reducing Racial and Economic Disparities in Sealant Prevalence Among Schoolchildren — Ohio, 1998-1999. *MMWR*, August 31, 2001;50(34):736-738.